IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Mihai Christodorescu

Art Unit: 2137

Serial No.:

10/629,292

Examiner:

Filing Date: July 29, 2003

Conf. No.:

Title:

Method and Apparatus to Detect Malicious Software

DECLARATION UNDER 37 C.F.R. § 1.131

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

- I, Mihai Christodorescu, declare:
- I am one of the inventors of the subject matter of the claimed subject matter in the above-identified U.S. Patent Application ("the invention") as recited in claims 1-17.
- 1 have reviewed and understand the scope of the claims of this Application.
- I have reviewed the "Detecting Malicious Patterns in Executables via Model Checking" University of Wisconsin, dated July 12, 2002, pages 1-15 (hereinafter "the <u>Christodorescu Presentation</u>").
- I prepared and retained sole custody of the <u>Christodorescu Presentation</u>

 prior to its public disclosure.

- The first public disclosure of the <u>Christodorescu Presentation</u> was after
 July 29, 2002. The date on the presentation is not the date that the presentation was made publicly available.
- 6. The presentation was presented on January 14, 2002 at the Virginia Center for Innovative Technology, 2214 Rock Hill Road, Herndon, Virginia 20170. This presentation was to obtain funding for a project entitled "Vulnerability and Information Flow Analysis of COTS, sponsored by the Office of Naval Research (ONR) under the Critical Infrastructure Protection and High Confidence, Adaptable Software (CIP/SW) program of the Multi-University Research Initiative (MURI). The presentation was not open to the public.
 - 7. The Meeting participants included
 - a. University of Wisconsin: Prof. Somesh Jha, Prof. Bart Miller, Prof. Tom Reps, students Gogul Balakrishnan, Mihai Christodorescu, Vinod Ganapathy, Jon Giffin, Anne Mulhern, Alexey Loginov.
 - b. Carnegie Mellon University (collaborators with Wisconsin on this project): Prof. Ed Clarke, postdoc Daniel Kroening, postdoc Ofer Shtrichman, student Sagar Chaki.
 - Office of Naval Research (the funding agency): Gary J. Toth,
 Ralph Wachter.
- 8. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under Section 1001 of Title

18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Respectfully submitted,

Mihai Christodorescu Date